NetComm

NTC-40W - HSPA+ M2M WiFi Router
NTC-40WV - HSPA+ M2M WiFi Router with Voice

Quick Start Guide

Quick Start Guide

This guide covers the models NTC-40W and NTC-40WV. This guide will provide a series of step by step instructions to ensure the configuration of your Cellular Router goes as smoothly as possible.
Firstly please check that you have received all the items in your package:

No.	Description
1	NTC-40W / NTC-40WV HSPA+ Cellular Router
1	Ethernet cable
1	Power Supply Unit
4	Antennas
1	Quick Start Guide

If any of these items are missing, please contact NetComm Technical Support.

Overview of LEDs

Overview of Indicator Lights

LED	Display	Description
POWER (red)	Solid ON	The red Power LED indicates correct power is applied to the DC power input jack.
Tx Rx (amber)	Solid ON	The amber LED will light upon data being sent to or received from the cellular network.
DCD (green)	Solid ON	The amber Carrier Detect LED illuminates to indicate a Data connection.
Service Type (green)	The green LED will illuminate when cellular network coverage is detected.	
	Solid ON	3G: indicates UMTS/HSPA available coverage
	Blinking	EDGE: indicates EDGE available coverage
	Off	2G: indicates GSM/GPRS available coverage only.
RSSI (green)	This green LED indicates the Received Signal Strength. There are three possible states that the RSSI LED can operate in, based upon signal level.	
	Solid ON	STRONG - Indicates the RSSI level is -86dBm, or greater
	Flashing once per Second	MEDIUM - Indicates the RSSI level is -101dBm and –86dBm, (medium)
	Off	POOR - Indicates the RSSI level is less than -101dBm (poor)

Overview of the Cellular Router Interfaces

SIM Card Reader

For insertion and removal of the SIM card

Mini USB Port

For insertion of the Mini USB cable

Receive Diversity Antenna Socket
SMA Female

2Way Captive Power Terminal Block
Power terminal block and the wide voltage range of 8-28V DC simplify the installation in different industrial environments

Main Antenna Socket
SMA Female

Ethernet Port
Connect to a terminal using RJ45 cable or a number of terminals through a hub or network router

Voice (RJ45) Port
Insert one end of the RJ-45 Cable into the Voice Port and the other end into a telephone

Only active on the NTC-40WV

Overview of Cellular Router Interfaces

Field	Description
Main Antenna Socket	SMA Female
Receive Diversity Antenna Socket	SMA Female
Main WiFi Antenna Socket	SMA Female
Receive Diversity Antenna Socket	SMA female
5 Indicator LEDs	Indicate visually the activities and connection state for power, service type, data traffic, data carrier connection and network signal strength.
2-Way Captive Power	Power terminal block and the wide voltage range of 8-28V DC
Terminal Block	simplify the installation in different industrial environments
Reset Button	Resetting the router to factory default values
Ethernet Port	For direct connection to your device or number of devices through a hub or network router.
Voice (RJ-45) Port	To connect a telephone directly to your router
SIM Card Reader	For insertion and removal of SIM Card

Configuring your Router

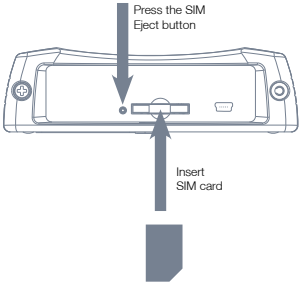
You will need the following hardware components to set up the Cellular Router:

- Power Supply (8-28VDC)
- Ethernet cable
- Laptop or PC
- Active SIM card

The router is primarily managed via web interface.
Before you power up the Cellular Router, please insert an active SIM card.

Step One: Inserting the SIM card

Press the SIM **Eject** button to eject SIM card bay. Make sure the SIM card is inserted correctly by inserting the SIM the gold side facing down on the SIM card bay and in the direction as shown below:



Step Two: Setting up the Cellular Router

Connect the supplied **antennas** to the Router by screwing them onto the antenna connectors.

Connect the **power adapter** to the mains and **plug** the output into the **power jack** of the router.The green **Power LED** on the panel should illuminate.

Polarity for MC100#50802 Terminal Block

Step Three: Preparing your computer

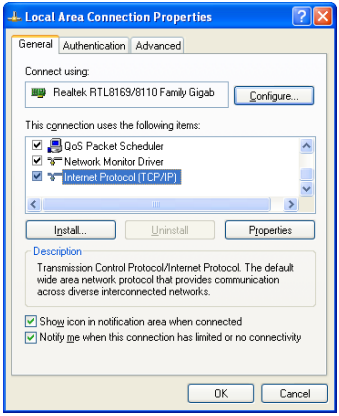
Connect one end of the supplied Ethernet cable into a LAN Ethernet port of your router. Connect the other end of the cable into the LAN port of your computer.

Configure your PC's Ethernet interface to be dynamically assigned an IP address by doing the following:

Configuring your Network Adapter in Windows

Click on **Start -> Control Panel -> Network Connections**.

Right click on the **Local Area Connection** icon and select **Properties** to open the configuration dialogue box of the Local Area Connection as below:

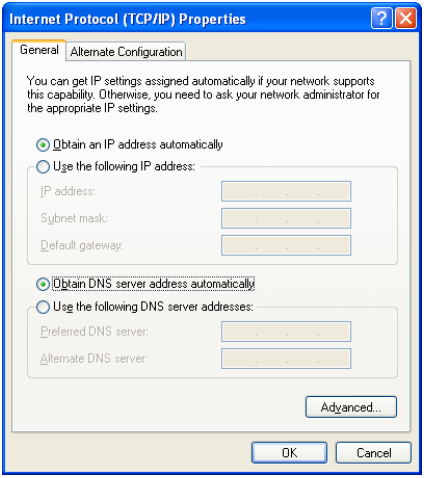


Find and click **Internet Protocol (TCP/IP)** from the protocol list box and then click the **Properties** button The TCP/IP. Configuration window will pop up as illustrated below.

Under General tab, select radio button **Obtain an IP address automatically** and **Obtain DNS server address automatically**.

Then press OK button to close TCP/IP configuration window.

Press the Close button to complete the computer preparation for the Cellular Router.


Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Step Four: Accessing your Router's configuration pages

There are two system management accounts for maintaining the system, **root** and **admin**, and each of which has slightly different levels of management capabilities.

The root manager account is empowered with full privilege while the admin manager (administrator) can manage all settings of the Cellular Router excepts functions like Firmware Upgrade, Device Configuration Backup and Restore and Reset Cellular Router to factory default.

To login to the Cellular Router in root manager mode, please use the following login details:

http://192.168.1.1	
Username:	root
Password:	admin

Enter the address below in your web browser and connect. The username and password are defined below.

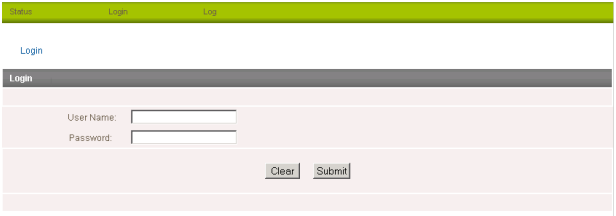
Whenever you make changes please refresh your web pages to prevent errors due to caching of web pages.

http://192.168.1.1	
Username:	admin
Password:	admin

Follow the steps below to access the Cellular Router's web browser:

- Open your web browser (e.g.Internet Explorer/Firefox/Safari) and navigate to **http://192.168.1.1/**
- Click **Login** and type **admin** in the Username and Password fields.

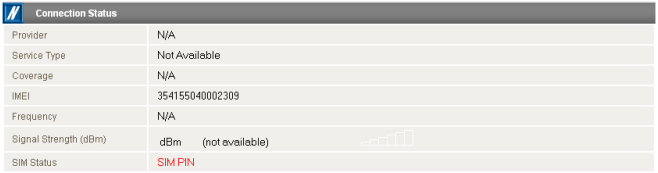
Then click on **Submit**.



Step Five: Unlocking the SIM

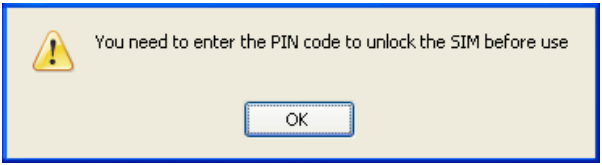
If the SIM card is locked you will need to unlock it with a PIN provided with your SIM card.

You can find out if the SIM is locked by viewing the SIM Status on the Home page:



If the SIM Status is SIM Locked as above then click on the **Internet Settings** menu and then the **Security** link on the left.

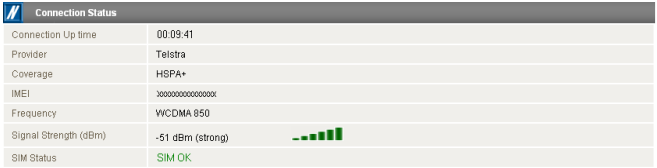
When you click on the 'Security' link you should see the following message:-



Click **OK**

Next, enter the **PIN code** and confirm the PIN code. Then click **Save**.

Now Click on the link and the Home Status page should look as below with SIM Status OK:



The SIM is now unlocked and can be used to connect to a 3G service.

Step Six: Connect to the Cellular Network

This section describes how to set up the Cellular Router to initiate a wireless WAN connection.

There are 2 different ways to set up a wireless WAN connection via PPP:

- Initiating the PPP Connection directly from the Cellular Router acting as the PPP Client (most common).
- Initiating the PPP Connection from a different PPP client (i.e. laptop or router) with the Router running in transparent PPPoE mode. This method is not documented in this quick start guide.

Initiating a PPP Connection from the Cellular Router

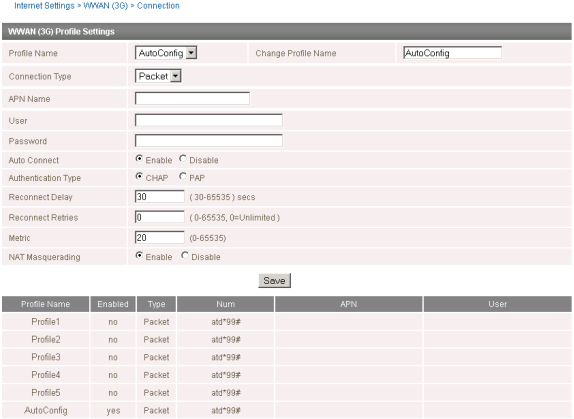
The status page of Cellular Router Setup will now be displayed as below.

The PPP status on the page should be DISABLED network (as indicated by the large arrow) as your new device is not yet configured to connect to the cellular network.

Click the **Internet Settings > WWAN (3G)** link on top panel of the screen to open the **Connection** web page.

To Connect Using a Connection Profile

The Router profiles allow you to configure the settings that the router will use to connect to a particular network.



By default, the Router is configured to use the AutoConfig profile. This profile should detect the correct APN and connection details in order to connect to your 3G service.

If it does not, you will need to enter the connection details manually. To do this, perform the following steps:

- In the AutoConfig profile, select to disable “Auto Connect” and click “Save”.
- Select one of the other profiles and configure it with the details provided by your 3G service provider.
- Select to enable “Auto Connect” for this profile and click “Save”.

To Confirm a Successful Connection

Now click on the Status link to return to the status page. The WWAN Status should be UP.

The Local field shows the current IP address that the network has allocated for the Router.

Congratulations - your new NetComm NTC-40W / NTC-40WV Router is now ready to use!

For more detailed information on the configuration and activation of other features, please visit our website www.netcomm.com.au and download the user guide.

Notes:

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Product Warranty

NetComm products have a standard 12 months warranty from date of purchase.

Technical Support

For firmware updates or if you have any technical difficulties with your product, please refer to the support section of our website.

www.netcomm-commercial.com.au/support